1 R **MISCELLANEOUS**
1 SS .High frequency vibratory devices
1.5 **ESCAPEMENTS**
2 **AUTOMATIC OPERATION OR CONTROL (E.G., TRIPS)**
3 .Speed controlled
3.2 ..Valve gear trips (e.g., steam engine "Corliss" type)
3.5 .Retarded
3.52 ..Plural, sequential, trip actuations
3.54 ..Clock train
3.56 ...Winding knob trip (e.g., alarm mechanism)
4 .Hit and miss
5 R **GYROSCOPES**
5.1 .With caging or parking means
5.12 ..Rotor spin and cage release type
5.14 ..And resetting means
5.2 .With gimbal lock preventing means
5.22 .Combined
5.34 .Multiple gyroscopes
5.37 ..With rotor drives
5.4 .Gyroscope control
5.41 ..Erecting
5.42 ...By plural diverse forces
5.43 ...By jet
5.44 ...By weight
5.45 ...By friction
5.46 ...By magnetic field
5.47 ...By motor torque
5.5 ..Damping
5.6 R .With pick off
5.6 A ..Optical
5.6 B ..Pneumatic
5.6 C ..Conducting liquid
5.6 D ..Electrical
5.6 E ..Electrical and magnetic
5.7 .With rotor drive
5.8 .Vertical gyroscopes
5.9 .Horizontal gyroscopes
5 F .Flexure hinges for gyros
6 **ENGINE STARTERS**
7 R .Automatic
7 A ..Separate power mesher
7 B ..Holders
7 C ..Clutch connection
7 D ..Worm and wheel
7 E ..Reduction gearing
8 .Radial meshing
9 .Cam operated
10 R **SHAFT OPERATORS (RADIO TUNER TYPE)**
10.1 .Preselected position
10.15 ..Step by step
10.2 ..Rotatable stop and projectable abutment
10.22 ..Digital dial type
10.27 ..Plural operator
10.29 ...Cam and follower
10.31 ....Adjustable cam
10.33 .....Sliding operator
10.35 ....Adjustable follower
10.37 .....Sliding operator
10.39 ...Rack and pinion
10.41 ..With detent or clicker
10.45 .Plural shafts
10.5 .Plural speed
10.52 ..Planetary
10.54 ..Separate operators
10.6 .Cam and follower
10.7 .Tensioned flexible operator
10.8 .Gear drive
10.85 ..Worm or screw
10.9 .Lever and linkage drive
10 A .Remote control
813 R **ROTARY MEMBER OR SHAFT INDEXING, E.G., TOOL OR WORK TURRET**
814 .With safety device or drive disconnect
815 .With locating point adjusting
816 .Preselected indexed position
817 ..Sequential
818 ...Skip position
819 ...Held by torque
820 ...Geneva or multilated gear drive
821 ...Velocity control
822 ...Interlocked rotator and brake
823 ....Diverse-type brakes
824 .....With axially acting friction brake
825 .Plural operators or input drives
826 .With means to axially shift shaft
827 .Single revolution input effects desired fractional output
813 C .Control means
813 L .Locking means
11 **POWER TAKE-OFF**
12 .Speedometer
13 .Wheel take-off
14 ..Wheel bed type
15 ..Supported pulley

15.2 .Plural take-off shafts
15.4 .With independent change speed gearing
15.6 .From shaft extension
15.63 ..Prime mover shaft, e.g., crank shaft
15.66 ..Change speed transmission shaft
15.69 ..Vehicle propeller shaft
15.8 .Intermediate ends of power transmitting line
15.82 ..Vehicle propulsion transmitting line
15.84 ...Between prime mover shaft and transmission
15.86 ...Drive from transmission gear
15.88 ...Between transmission and propeller shaft
16 **POWER TABLES AND STANDS**
17 **WASHER AND WRINGER**
17.5 **FULL STROKE MECHANISM**
17.8 **MOTION TRANSFER THROUGH IMPERFORATE FLEXIBLE SEAL**
18 **FLEXIBLE SEALING DIAPHRAGM ATTACHED TO MOVING ROD AND TO CASING**
18.1 .Pivoting or nutating rod
18.2 .Longitudinally reciprocating rod
828 **ALTERNATING-MOTION DRIVEN DEVICE WITH MEANS DURING OPERATION TO ADJUST STROKE**
829 .Constant length stroke with means to displace end limits
830 ..Cyclical displacement responsive to the alternating-motion
831 .Stroke adjustable to zero and/or reversible in phasing
832 ..Plural driving means to jointly drive the driven device
833 ..Device driven from selected points on oscillating link
834 ..Driving lever with adjustable pivot point
835 ..Eccentric and strap drive, shiftable eccentric
836 ...Changing the extent of eccentricity
837 ..Crank pin drive, shiftable pin
838 ..Cam and follower drive
839 ...Axial-type cam (e.g., wabbler type)
840 **ROTARY DRIVEN DEVICE ADJUSTABLE DURING OPERATION RELATIVE TO ITS SUPPORTING STRUCTURE**
841 .Screw and nut adjusting means
842 .Rack and pinion adjusting means

MECHANICAL MOVEMENTS

20 .Oscillating to reciprocating and alternating rotary
21 .Oscillating to reciprocating and intermittent rotary
22 R .Rotary to reciprocating and rotary
22 A ..Rotary to reciprocating or rotary
23 .Rotary to reciprocating and alternating rotary
24 .Rotary to reciprocating and intermittent rotary
25 .Rotary to or from reciprocating or oscillating
26 ..Head motions
27 ..Reciprocating carriage motions
28 ...Phonograph type
29 ..Rack and pinion type
30 ...Shifting rack
31 ...Shiftable pinion
32 ...Segmental pinion
33 ...Alternately rotated pinion
34 ...Clutchable gears
35 ....Bevel
36 ..Overcoming dead center
37 ..Belt or chain carried member
38 ..Crank, lever, toggle, and slide
39 ..Crank, lazy-tong, and slide
40 ..Crank, pitman, lever, and slide
41 ...Pump jack type
42 ..Crank, pitman, and lever
43 ...Multiple levers
44 ..Crank, pitman, and slide
45 ..Crank, lever, and slide
46 ...Rack connections
47 ..Crank and lever
48 ...Slidable connections
49 ..Crank and slide
50 ...Slidable connections (e.g., scotch yoke)
51 ..Crank and multiple pitmans
52 ..Planetary gearing and slide
53 ..Cam, lever, and slide
54 ..Cam and lever
55 ..Cam and slide
56 ...Axial cam
57 ....Grooved
58 .....Multiple screw
59 .....Alternately rotated screw
60 ...Wabbler type

61 ..Unbalanced weights
62 ..Trammel-pitman
63 .Rotary to rotary
64 ..Inertia or centrifugal transmitters
65 ..Crank, pitman, lever, and crank
66 ..Crank, lever, and crank
67 ..Crank, pitman, and crank
68 ..Cranks, link connected
69 ..Cranks, slidable connections
70 .Rotary to alternating rotary
71 ..Mangle connections
72 ...Shiftable driven gear
73 ....Central teeth
74 ...Multilated gearing connections
75 ..Crank, pitman, and lever
76 ..Reciprocating rack connections
77 ...Crank and pitman actuator
78 ...Simple crank actuator
79 ..Oscillating rack connections
80 ...Mangle actuated
81 ...Crank and pitman actuator
82 ..Flexible connector type
83 ..Associated inertia devices
84 R .Rotary to intermittent unidirectional motion
84 S ..Space machines
86 .Rotary to gyratory
87 ..Unbalanced weight
88 .Reciprocating or oscillating to intermittent unidirectional motion
89 .Reciprocating or oscillating to or from alternating rotary
89.23 ..Including screw and nut
89.24 ...Shaft shorter than nut
89.25 ...Auxiliary drive (e.g., fluid piston, etc.) for load
89.26 ...Alternate power path operable on failure of primary
89.27 ...Single input split into two intermediate outputs that are subsequently superposed into a single output
89.28 ...Single input, plural outputs
89.29 ...Plural inputs, single output
89.3 ....Plural nuts driving shaft
89.31 ....Shaft and nut driven
89.32 ...Carriage surrounding, guided by, and primarily supported by member other than screw (e.g., linear guide, etc.)
89.33 ...Carriage surrounded, guided, and primarily supported by member other than screw (e.g., linear guide, etc.)
89.34 ...Shaft moves through rotary drive means
89.35 ...Plural screws in series (e.g., telescoping, etc.)
89.36 ...Deflection related
89.37 ...Limit stop
89.38 ...Including means to selectively transmit power (e.g., clutch, etc.)
89.39 ...Means to selectively lock or retard screw or nut
89.4 ...Contamination related
89.41 ....Imperforate enclosure
89.42 ...Backlash
89.43 ...Pressurized fluid introduced between nut and screw
89.44 ...Lubrication
89.45 ...Manually driven
89.1 ..Including inertia device
89.11 ...With rack and pinion
89.12 ....Rectilinear rack
89.13 ..Including bevel gears
89.14 ..Including worm
89.16 ..Including spur gear
89.17 ...With rack
89.18 ....Curvilinear rack
89.19 .....With biasing means
89.2 ..Including flexible drive connector (e.g., belt, chain, strand, etc.)
89.21 ...With sprocket wheel
89.22 ...With pulley
96 .Oscillating to oscillating
97.1 ..Snap action
97.2 ...Plate spring
98 ..Geared connections
99 R .Reciprocating to or from oscillating
100.1 ..Snap action
100.2 ...Plate spring
101 ..Compound lever and slide
102 ..Lever and slide
103 ...Straight line motions
104 ...Slidable connections
105 ...Link connections
106 ...Toggle transmissions
107 ...Cam connections
108 ...Flexible connections
109 ..Rack and pinion
99 A ..Inclined ramp

110 .Reciprocating to reciprocating
111 **MECHANICAL MOVEMENTS (INTERMITTENT GRIP TYPE)**
112 .Rotary to intermittent unidirectional motion
113 ..Automatically controlled
114 ...Speed
116 ..Rotary crank or eccentric drive
117 ...Adjustable
118 ...Lever transmitter
119 ....Adjustable leverage
120 ...Rack and pinion transmitter
121 ....Adjustable throw
122 ...Rotary cam drive
123 ....Adjustable throw
124 .....Radial cam
125 ....Radial cam
125.5 ..Intermittently engaged clutch
126 .Oscillation or reciprocation to intermittent unidirectional motion
127 ..Screw and nut devices
128 ..Slide actuator
129 ...Multiple acting
130 ..Rack actuator
131 ...Multiple acting
132 ....Inwardly facing racks
133 ...Oscillating
134 ....Multiple acting
135 .....Inwardly facing racks
..Strap actuator
136 ...Multiple acting
137 ....Spring or weight return
138 ...Single acting
139 ....Engine starter type
140 .....Spring or weight return
141 ....Spring or weight return
141.5 ..Lever actuator
142 ...Rotary driven element
143 ....Multiple acting
144 .Grip units and features
145 ..Compound movement handle
146 ...Reversible
147 ...Transverse pivots
148 ..Gripper releasing devices
149 ...Power pawl lifter
150 ....Automatic
151 .....Idle stroke
152 ......Cooperating holding pawl
153 .....Power stroke
154 ....Cooperating holding pawl
155 ...Holding pawl lifter
156 ..Gripper mountings, lever
157 ...Reversible
158 ...Multiple acting
159 ....Single ratchet or clutch
160 ..Gripper mountings, slide
161 ...Multiple acting
162 ..Grip features
163 ...Driving band
164 ....Clamping
165 ...Driven band and gripper
166 ....Positive grip
167 ...Driving ratchet-bar or rack
168 ....Multiple acting
169 ...Driven ratchet-bar and power dog
625 **ALTERNATE MANUAL OR POWER OPERATORS**
640 **GEARING**
650 .Nonplanetary gearing differential type (e.g., gearless differentials)
655 .Single gearing unit includes fluid drive
661 .Plural prime movers selectively coupled to common output
664 .Plural power paths from prime mover
665 R .Plural power paths to and/or from gearing
670 ..Alternate input connections single hand crank
718 ..Fluid drive divides or combines alternate paths
720 ..One path includes fluid drive
721 ..Friction-type gearing
724 ..Worm-type gearing
665 A ..Single driven plural drives
665 B ...Parallel
665 C ...Nonparallel
665 D ...Aligned
665 E ...Parallel and aligned
665 F ..Single drive plural driven
665 G ...Parallel
665 GA ....Spur
665 GB ....Bevel
665 GC ....Spur and bevel
665 GD ....Helical
665 GE ....Belt or chain
665 H ...Nonparallel
665 S ...Aligned
665 T ....Vehicle
665 K ...Concentric
665 L ..Plural drivers plural driven
665 M ...Bevel
665 N ...Spur
665 Q ..Alternate drivers and driven

665 P ..Miscellaneous (plural power paths)
730.1 .With fluid drive
731.1 ..Condition responsive control
732.1 ..With one or more controllers for gearing, fluid drive, or clutch
733.1 ...With interrelated controls
745 .In series plural interchangeably locked nonplanetary units
810.1 .Reversal of direction of power flow changes power transmission to alternate path
810.2 ..Input and output exchange functions
216.3 .Toothed gear and recirculated unconnected elements
318 .Alternating rotary or continuous
319 .Alternating rotary
320 ..Progressive
321 ..Shiftable and/or slidable gears
322 ..Clutchable gears
323 ...On single driven member
324 ...On single driving member
325 .Interchangeably locked
329 ..Disconnectable counter shaft
330 ..Multiple concentric clutch shafts
331 ..Plurality of counter shafts
332 ..Internal-external gears
333 ..Combined gear and clutch
334 ...Preselector
335 ..Control mechanism
...Automatic
336 R ....Speed responsive
336.5 .....Governor
336 B .....With belt gearing
337 ....Torque responsive
337.5 ...Cam operated
339 ..Meshing assisters
340 ...Double clutch and interposed transmission
..Longitudinally slidable
...Multiple spur gears
341 ....With tumbler gear
342 ....Selective
343 .....Direct clutch and drive
344 ....Progressive
345 .....Direct clutch and drive
346 ....Fluid operated
347 ...Multiple bevel gears
...Single spur gear
348 ....Tumbler and cone
349 .....Multiple cone
350 ...Single bevel gear
351 ...Pin or crown gears
352 ..Laterally slidable gears
353 ...Rotary carriage
354 ...Swinging carriage
355 ..Single forward and reverse speeds
..Slidable keys or clutches
356 ...Alternative clutch shaft
...Multiple clutch shafts
357 ....Progressive
358 .....Keys simultaneously slidable
359 ....Selective
360 ....Multiple forward and reverse
361 ....Single forward and reverse
...Single clutch shaft
....Progressive
362 .....Multiple key
363 ......Spur
364 ....Fluid operated
365 ....Electrically operated
366 .....Single key
368 ......Clutch and ratchet
369 ......Spur gears
370 ....Intermediate clutch
371 ....Sliding clutch carrier
372 ....Sliding clutch operator
373 ....Selective
374 .....Multiple key
375 ......Spur gears
376 ....Single speed forward and reverse
377 .....Spur gears
378 .....Bevel gears
379 .....Bevel and idler gears
380 .Pivotally supported
381 ..Windmill turntable
383 ..Screw
384 ..Spur
385 ..Bevel
386 ...Wheel type
387 ...Wringer type
388 R .Follow-up mechanism
388 PS ..Power steering
390 .Eccentric driving shaft and axle
391 .Central driving shaft in axle
392 .Parallel shafts, adjustable gear mesh
393 .Varying speed ratio
395 .Adjustable
396 ..Relative movable axes
397 ...Parallel shafts
398 ...Automatic control
399 ....Parallel shafts

400 ..Fixed axes
401 ...Parallel shafts
402 ...Automatic control
403 ....Parallel shafts
404 .Reversing means
404.5 ..Governor control
405 .Disconnecting means
406 .Displaceable elements
409 .Backlash take-up
410 .Pressure distributing
411 .Yieldability in gear trains
411.5 .With brake means for gearing
412 R .Directly cooperating gears
413 ..Parallel axes or shafts
414 ...External type
415 ....Pin teeth
416 ..Intersecting axes
417 ...Bevel gear type
422 ..Rack and pinion
420 ..Spur and bevel
421 R ..Spur
421 A ...Motor and gearing
423 ..Bevel
424 ...Motor vehicle drive
424.5 ..Spiral
424.71 ...Screw and nut
424.72 ....Plural longitudinally variably spaced nuts
424.73 ....Threadless
424.74 ....Non-linear screw
424.75 ....Thread geometry
424.76 .....Thread pitch varies over axial length
424.77 .....Shaft thread is spirally wound wire
424.78 ....Nut disengageable from screw
424.79 .....Nut segments hinged parallel to shaft (e.g., clam shell-type, etc.)
424.81 ....Rolling element engaging thread
424.82 .....Recirculating rolling elements
424.83 ......Plural independent recirculating element paths
424.84 ......Single thread common to plural paths
424.85 ......Roller return path in shaft
424.86 ......Return path geometry
424.87 ....Rolling element deflector
424.88 ......Interconnected or cooperating rollers or roller structure
424.89 .....Non-recirculating rolling elements
424.9 ......Captured sphere
424.91 ......Cylindrical or quasi-cylindrical roller element (e.g., inclined roller, etc.)
424.92 ....Parallel to shaft
424.93 ....Perpendicular to shaft
424.94 ....Less than 360 degrees of contact between nut and screw
424.95 .....Independent nut segments
424.96 ......Integral deformable tangs engaging screw
424.6 ...Driven rack or shaft
424.7 ...Screw
425 ...Worm
425.5 ....Variable speed
426 ....Intermittent motion
427 ....Distribution of pressure
412 TA ..Torque actuated safety devices
431 .Gear and rotary bodies
432 ..Laterally-spaced wheels
433 ..Radially-spaced wheels
434 .Rotary bodies
435 ..Mutilated
436 ..Geneva
437 ..Irregular teeth and bodies
438 ..External and internal teeth
439 ..Sectional
440 ...Backlash take-up
441 ....Screw and nut
443 ...Sound deadening
444 ...Differential disks
445 ...Multiple disks
446 ...Separate rim
447 ....Detachable
448 ...Segmental rim
449 ...Sheet metal
450 ...Diametrically split
451 ...Shaft-admitting insert
457 .Teeth
458 ..Worm and helical
459.5 ..Bevel
460 ..Spur
461 ...Yieldable
462 ...Form
464 ....Antifriction
465 .....Roller
466 ....Twisted
467 .Lubrication
468 ..Teeth
469 **CONTROL LEVER AND LINKAGE SYSTEMS**
470 .Resilient connections
471 R .Multiple controlled elements

473.1 ..Transmission control
473.11 ...Fluid actuator
473.12 ...Electrical actuator
473.13 ...Occupant propelled vehicle
473.14 ....Transmission controlled by flexible cable
473.15 ...Transmission controlled by flexible cable
473.16 ...Foot operated
473.17 ....Multiple foot-operated controls
473.18 ...Control convertible between automatic and manual operation
473.19 ...Control of plural mechanisms (e.g., control of transmission and control of 4 - wheel drive)
473.2 ....Separate control levers
473.21 ...Restriction of shift, gear selection, or gear engagement
473.22 ....Prevention of reverse shift
473.23 ....Separate actuator to disengage restrictor
473.24 ....Shift element interlock
473.25 .....With detent, recess, notch, or groove
473.26 .....Resiliently biased interlock
473.27 ....Spherical restrictor
473.28 ....Resiliently biased restrictor
473.29 ...having vibration damper
473.3 ...Manually operated selector (e.g., remotely controlled device, lever, push button, rotary dial, etc.)
473.31 ....Control lever on steering column
473.32 .....Control lever movable through plural planes
473.33 ....Control lever movable through plural planes
473.34 .....Spherical mount (e.g., ball and socket)
473.35 ......Resiliently biased control lever
473.36 ...Particular element (e.g., shift fork, template, etc.)
473.37 ....Shift fork structure
478 ..Foot operated
478.5 ...Offset extension
471 XY ..Control moves in two planes
479.01 .Multiple controlling elements for single controlled element
480 R ..Interconnected
481 ...Hand and foot
482 ....Accelerator
480 B ...Marine
483 R ..Interlocked
483 PB ...Push button
483 K ...Rod blocks actuation of rotary member
484 R ..Steering and controls assemblies
485 ...Rotary control shaft
486 ...Reciprocating control elements
487 ....Flexible
488 ....Handle bar type
489 .....Flexible control element
484 H ...With horn control
490 ..Antirattling elements
490.01 ..Robotic arm
490.02 ...Including power cable or connector
490.03 ...Including electric motor
490.04 ...Including flaccid drive element
490.05 ...Joint between elements
490.06 ....Wrist
490.07 ..Power elements as controlling elements
490.08 ...Planar surface with orthogonal movement and rotation
490.09 ...Planar surface with orthogonal movement only
490.1 ...Pair of power elements
490.11 ..Power and manual controlling elements
490.12 ..Manual controlling elements
490.13 ...Planar surface with orthogonal movement or rotation
490.14 ...Levers
490.15 ....Pair of levers
491 .Hand operated
492 ..Steering posts
493 ...Adjustable
494 ...Auxiliary operators
495 ...Position controllers
496 ...Motion translating mechanism
497 ....Cam type
498 ....Gear type
499 .....Screw and nut
500 .....Worm
500.5 ..Flexible transmitter (e.g., Bowden cable)
501.5 R ...Constant tension sustaining
501.5 H ....Hydraulic control
501.6 ...And hand operator
502 ....Slidable
502.1 ....For moving a mirror

502.2 ....Single rotatable lever (e.g., for bicycle brake or derailleur)
502.3 ...Including rolling antifriction elements
502.4 ...And sheath support, connector, or anchor
502.5 ...Specific cable or sheath structure
502.6 ...Specific cable connector or guide
503 ..Sliding rod
504 ..Rotatable rod, shaft, or post
505 ...Gear, drum, and cable
506 ...Drum and cable
507 ...Gear
508 ....Variable ratio
509 ....Screw and nut
510 ...Adjustable
511 R ...Mountings
511 A ....Antenna
512 .Foot operated
513 ..Accelerator
514 ..Signal
515 R .Knee operated
515 E ..Elbow
516 .Variable output force
517 ..Flexible
518 ..Variable input leverage
.Elements
519 ..Levers
520 ...Toggle
521 ....Lazy tongs
522 ...Adjustable
522.5 ...Swing posts
523 ...Hand
524 ....Jointed
525 ....Adjustable
526 ...Stops
527 ..Detents
528 ...Hand crank
529 ...Interrelated lever release
530 ...Gear
531 ...Friction
532 ...Lever engaging
533 ...Lever engaging rack
534 ....Pivoted
535 ....Lever carried pawl
536 ....Handle release
537 ....Finger lever release
538 .....Slidable
539 ....Pedal controlled
540 ...Lever carried rack
541 ....Pivoted
542 ....Pedal controlled
543 ..Handles
544 ...Extension
545 ...Hand crank
546 ....Extensible
547 ....Collapsible
548 ...Shaft connections
550 ....Engine starter type
551 .....Holders
551.1 ...Handle bars
551.2 ....Spring biased or supported
551.3 ....Folding or adjustable
551.4 .....Sectional
551.5 ......Simultaneously movable
551.6 .....Continuous
551.7 ......With handle latch
551.8 ....Attachments and accessories
551.9 ....Handholds and grips
552 ...Hand wheels
553 ....Knob or dial
554 ....Slidable
555 ....Pivoted
556 .....Releasable
557 ....Handles
558 ....Rim grips and covers
558.5 ...Caps and covers
559 ..Rocker arms
560 ..Pedals
561 ...Treadles
562 ...Extension
562.5 ....Offset
563 ...Pads and covers
564 ..Foot rests
565 ..Controller checks
566 ..Slot closers and lever guards
ELEMENTS
567 .Cams
568 R ..Adjustable
568 FS ...Flexible strip
568 M ...Memory devices
568 T ...Timer devices
569 ..Follower
570 .Eccentrics and straps
571 R ..Adjustable
571 L ...Radially adjusted
571 M ...Rotatably adjusted
572 .Flywheels and rotors
573 R ..With balancing means
573 F ...Fluid balancing means
574 ..With vibration damping means
575 .Pawls and ratchets
576 ..Noiseless
577 R ..Pivoted pawls
577 S ...Single tooth

577 SF ...Flexible single tooth
577 M ...Multiple tooth
578 ..Sliding pawls
579 R .Pitmans and connecting rods
580 ..Radial
581 ..Yieldable
582 ...Longitudinal springs
583 ...Fluid cushion
584 ...Automatic release
585 ....Toggle link type
586 ..Longitudinally adjustable
587 ..Hollow rod, lubricated
588 ..Sheet metal type
589 ..Counterbalanced
590 ...Weight type
591 ....Rotating
592 ...Spring
593 ..Section coupled
594 ..Bearings, adjustable
579 E ..Engine type
579 F ..Idler arm
594.1 .Cranks and pedals
594.2 ..With attached gear
594.3 ..Variable
594.4 ..Pedals
594.5 ...Counterbalanced
594.6 ...With toe or shoe clips
594.7 ...Adjustable or folding
595 .Cranks and wrist pins
596 ..Multiple throw
597 ...Sectional
598 ..Sectional
599 ..Yieldable
600 ..Adjustable
601 ...Automatically
602 ..Variable
603 ..Counterbalanced
604 ...Vibration dampers
605 ..Lubricated
606 R .Gear casings
607 ..Axle and torque tubes
606 A ..Cooling
608 .Guards
609 ..For rotary member
612 .Guard mechanisms
613 ..Automatic
614 ...Oscillating member actuator
615 ...Reciprocating member actuator
616 ..Operator controlled
617 ..Set screw

CROSS-REFERENCE ART COLLECTIONS

900 **PARTICULAR SHIFT PATTERN**

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 **TRANSMISSION CONTROL (74/473 R)**
FOR 101 .Foot operated (74/474)
FOR 102 .With detent mechanism (74/475)
FOR 103 .With reverse lockout (74/476)
FOR 104 .With interlocked elements (74/477)
FOR 105 .Pivot mounting (74/473 P)
FOR 106 .Near steering wheel (74/473 SW)

DIGESTS

DIG 1 **HYDRAULIC CONTROL SYSTEMS AUTOMATIC AUTOMOTIVE CONTROLS**
DIG 2 **MISCELLANEOUS CONTROL SYSTEMS (E.G., SHIP PROPULSION, MACHINE TOOLS, ETC.)**
DIG 3 **MOVABLE VAN OR BLADE TORQUE CONVERTERS**
DIG 4 **MAGNETIC GEARING**
DIG 5 **GAS TURBINE WITH GEARING**
DIG 6 **TRANSISTOR-ELECTRONIC GEARING CONTROLS**
DIG 7 **INDICATORS-SENSORS AND METERS**
DIG 8 **MARINE CONTROL-SHIP TRANSMISSION CONTROL MEANS**
DIG 9 **PERPETUAL MOTION GIMMICKS**
DIG 10 **POLYMER DIGEST - PLASTIC GEARS**
DIG 11 **CREEPER SPEED**
DIG 12 **NOVIKOV GEARS**